REMARKS

The Office Action dated January 27, 1997 has been carefully reviewed. In response thereto, claims 2, 4 and 5 have been amended. Claim 6 has been added. Claims 2 and 4-6 remain active in the application.

Claims 2, 4 and 5 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claims 2, 4 and 5 stand rejected under 35 U.S.C. § 102(a). Claims 2, 4 and 5 are rejected under the judicially created doctrine of non-obviousness non-statutory double patenting.

Claims 2, 4 and 5 stand rejected under 35 U.S.C. § 112, second paragraph, for being indefinite. Applicants respectfully submit that this rejection is traversed by the amendment which clarifies the claims in response to the Examiner's specific objections. The Office Action states that the "examiner is not certain that the meets [sic] and bounds of these claims can be determined because of the language in the disclosure and claims." It further states that "[a]pplicants are being requested to reference the claim limitations in this application to the disclosure so that the meets [sic] and bounds of these claims can be properly considered." Applicants traverse this rejection and submit they are under no duty to prospectively reference claim limitations to the specification where the Examiner has not specifically identified what is objected to as indefinite. MPEP § 2111 states that "[d]uring patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.'" Also, it is only "when the specification provides definitions for terms appearing in the claims

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that the specification can be used in interpreting claim language." MPEP § 2111.01.

Applicants respectfully request that this blanket rejection for indefiniteness be withdrawn.

However, in order to advance the prosecution of the present application, Applicants shall provide a summary of the pertinent disclosure including reference to examples supporting the claimed subject matter.

The present application claims priority under 35 U.S.C. § 120 of the following applications:

Serial No.	Filing Date	Patent No.
08/113,329	August 30, 1993	Pending
08/056,501	May 3, 1993	5,335,277
07/849,226	March 10, 1992	5,233,654
07/588,126	September 25, 1990	5,109,414
07/096,096	September 11, 1987	4,965,825

Consequently, the Applicants will demonstrate disclosure only with respect to Application serial no. 07/096,096, issued as U.S. Pat. No. 4,965,825 (hereafter, the "'87 case").

In their 1987 continuation-in-part specification, applicants disclose "an integrated system of programming communication" which encompasses many inventions and deliberately includes many embodiments. Their teaching technique is to introduce the principles of their integrated system in a series of *related* examples. Each example builds upon structure and principles introduced earlier. Examining basic principles in

detail in early examples, enables the specification with concreteness to expand and extend the scope of the teaching in later examples.

Starting with "**One Combined Medium**" on page 19 which focuses on the creation and delivery of a receiver specific graph in a broadcast or cablecast television program, "Wall Street Week," the specification introduces concepts of personalization of mass media and broadcast control of receiver station computing equipment. At page 28 *et seq.* it describes apparatus that include signal processors and signal decoders and introduces the concept of a signal processor *system*. At page 40 *et seq.* it teaches the composition of signal information and the organization of message streams.

Then in a series of four **examples, #1 through #4** which begin on pages 108, 143, 162, and 197 respectively, the specification demonstrates how receiver stations communicate signal processor apparatus and methods (*"SPAM"*) processor code and data of the integrated system of programming communication to *some* apparatus they actuate, how decryption occurs, how metering and monitoring take place, and how actuated apparatus perform. Each example builds on concepts introduced earlier in the specification to provide a detailed teaching of its own subject matter, and a particularly important teaching occurs from pages 156 through 162 where the specification teaches the structure and operating capabilities of a *controller of a decoder*.

Building on all that precedes it, **example #5**, which begins on page 248, then relates how the integrated system processes a multichannel communications system, which conveys different types of signals, in order to monitor programming availability and enable receiver station apparatus to receive desired programming.

From pages 278 through 312, in **example #6** and especially **example #7**, which

includes both digital and analog television signals and relates to the "Wall Street Week"

program (and which has further disclosure at pages 427 through 447), the specification

teaches regulating reception and use of programming of the integrated system of

programming communication.

At page 312 *et seq.* it relates further monitoring concepts.

From page 324 through page 390 the specification teaches a series of transmitter

station and transmitter network concepts. This portion of the specification also relies on

all previous disclosure in that special attention is given to intermediate transmission

stations which, *as receiver stations*, respond to programming transmissions of the

integrated system as well as storing, organizing, generating, and transmitting

programming. At page 340 *et seq.* **example #8** teaches distribution to, storage and

organization at, and retransmission from intermediate transmission stations (*"ITS"*) of

SPAM programming -- most specifically television spot commercials. At page 354 *et*

seq. **example #9** teaches automating intermediate transmission station combined

medium operations by describing how an intermediate transmission station responds to

an intermediate generation set and other elements of the integrated system to generate

processor code and data and transmit the code and data with SPAM programming --

spot commercial unit Q of example #8 -- all of which are subsequently shown in the

specification to operate at receiver stations to deliver receiver specific programming at

video monitors, speakers, printers, and transmitters (telephones which communicate to

remote data collection stations). At page 374 *et seq.* **example #10** extends the transmitter

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and network automating concepts of examples #8 and #9 by disclosing *a plurality* of intermediate transmission stations generating processor code and data, in the fashion of example #9, and inserting different code and data into a *network originated* transmission of SPAM programming -- again the unit Q television spot commercial.

From page 390 through 516, the specification discloses further ultimate receiver station (*"URS"*) automation concepts, including regulating the URS environment (page 396 *et seq.*), controlling multiple receivers and output devices to present coordinated output (page 406 *et seq.*), receiving selected programming of the integrated system (page 419 *et seq.*), certain *integrated system computer system concepts* (page 427 *et seq.*), whose **example #7** (page 427 *et seq.*) description relies on the receiving selected programming concepts of pages 419-427. At page 447 *et seq.* the specification discloses certain data maintenance, timing control, efficiency, and other concepts involved in controlling combined media operations. At page 457 *et seq.* the specification discloses certain timing, imaging, communication, and transmission processing concepts that relate to efficient delivery of integrated system programming. At page 463 *et seq.* the specification relates to user specific audio, print, and other combined media besides receiver specific video.

With all this preparation, the specification teaches, from page 469 through page 516, the combined media presentation of **examples #9 and #10** at a plurality of ultimate receiver station (which are responding to signals sent by different intermediate transmission stations).

At page 516 *et seq.* the specification discloses enhancing and extending functionality of the integrated system by reprogramming receiver apparatus and enabling receiver stations to process transmissions having new forms of composition.

Finally, at page 533 *et seq.* the specification discloses **"Summary Example" (#11)** which teaches a very large scale integrated data processing and communications problem and its solution(s), using *all of* the disclosed integrated system with iterative broadcasting, response, and refinement.

Because of the integrated nature of the disclosure, no part of the specification is intended to by considered *in isolation.* However, in the present application, the examiner's attention is directed to the '87 specification at page 69, line 9 through page 84, line 23; page 174, line 28 through page 177, line 24; page 370, line 15 through page 371, line 3; page 385, line 30 through page 386, line 14; and Figure 3A, items 39F and 39H. The foregoing is intended to be exemplary only and in no way to limit the claimed invention to the specifics of the cited passages.

Claims 2, 4 and 5 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 2, 4 and 5 have been amended to clarify the antecedent of the control invoking instruction.

Claims 2, 4 and 5 are rejected under 35 U.S.C. § 102(a) as being anticipated by U.S. Patent No. 4,536,791 to Campbell *et al.* (Campbell).

The examiner has equated the display memory 130 in Campbell to the claimed "valve." Office Action, page 25, line 3 of last full paragraph. Presumably, the examiner has equated text/graphics generator 118 to the claimed "processor." *Id.* at last full paragraph, line 7-9

In Campbell, a text/graphics generator 118 provides, for display, display characters and graphic symbols that have been transmitted on the vertical interval. Campbell, col. 9, lines 27-29. In the full-channel text format of Campbell, text information in the form of pages and indexed according to video field lines may be selected by a user for display. Campbell, col. 22, lines 20-29. Once the paginal text information is selected, the converter control logic 104 steps down through the lines of data being transmitted, locates the appropriate page on a given line and then collects the data from the line for display memory 130. Campbell, col. 22, lines 51-55. In other words, selected pages are loaded into the display memory 130. Campbell, col. 22, lines 29-34. Campbell discloses that the display memory 130 receives screen control data from the converter control logic 104 along data link 124. Campbell, col. 9, lines 29-33. The display memory 130 is filled with appropriate data from the converter control logic unit 104. Campbell, col. 22, lines 10-14. In turn, the display memory 130 sends the display characters along data link 132 to the text/graphics generator 118 for display. Campbell, col. 9, lines 29-33. Thus, Campbell discloses that converter control logic unit 104 transmits to and fills display memory 130 with "display characters," "graphic symbols," "selected pages," "screen control data" and "appropriate data," and that display memory 130 sends display characters.

Amended claim 2 recites the step of controlling a valve at a receiver station to perform one of the functions of ceasing to communicate and commencing to communicate embedded signals to at least one processor at the receiver station.

Applicants submit that Campbell fails to disclose that the display memory 130 ever performs one of the functions of "ceasing to communicate" or "commencing to communicate" the characters, symbols, pages, data (examiner's "signals") to the text/graphics generator 118 (examiner's "processor"). Applicants submit that disclosure that the display memory 130 is "filled" with data and "sends" display characters does not anticipate either of the functions of ceasing to communicate and commencing to communicate embedded signals to at least one processor at the receiver station. Accordingly, Campbell fails to anticipate the step of controlling.

In Campbell, the display memory 130 (examiner's "valve") is "filled" with data and "sends" display characters. Campbell, col. 22, line 11; and col. 9, line 31. Filling a memory does not anticipate a step of *controlling* the memory. A memory sending does not anticipate a step of *controlling* the memory. From the lack of Campbell disclosing otherwise, it appears that the memory 130 being filled with data and the memory 130 sending display characters are innate functions of the memory 130 that do not require that the memory 130 be controlled in order to take place. Indeed, Campbell does not disclose that the memory 130 is controlled in order for the filling and sending to take place. Therefore, assuming *arguendo* that Campbell discloses the claimed embedded signals and the memory ceasing or commencing communication as claimed, Applicants submit that Campbell fails to disclose that the memory 130 is *controlled* to perform one

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of the functions of ceasing to communicate and commencing to communicate embedded signals to the text/graphic generator 118 (examiner's "processor) and, thus, fails to anticipate the step of controlling.

Amended claim 2 recites the step of detecting, at said valve, valve control signals that are embedded in the embedded signals of the received transmission.

Campbell does not disclose detecting anything at the display memory 130 (examiner's "valve"). Assuming *arguendo* that there is a detecting taking place at the display memory 130, Campbell fails to disclose that what is detected is a valve control signals that are responded to as per amended claim 2. Campbell also fails to disclose that what is assumed to be detected at the memory 130 is embedded in an embedded signal that is embedded in an information transmission that is included in a broadcast or cablecast transmission. See discussion, *supra*, regarding extractor 114 and "embedded signals". Accordingly, Campbell fails to anticipate the steps of detecting and controlling.

The examiner states that "valve control signals are embedded and communicated at specific times coinciding with the vertical blanking interval." Office Action, page 25, last full paragraph, lines 5-6. Presumably, the examiner is relying on the words disclosed in Figure 11 of Campbell, which are transmitted on the vertical interval of television signals, to anticipate the claimed valve control signals. See Campbell, col. 12, lines 58-60.

Campbell discloses that data transmitted on the vertical interval between data control system 12 and addressable converter 40 is of two types; control data and text data. Col. 12, lines 59-64. The control data is further divided into subscriber addressing data and channel control data. Col. 12, lines 64-66.

The channel control data describes the authorization that is required so that the converter 40 may gain access to the television program currently being transmitted on a selected channel. Col. 15, lines 17-21. The format for the channel control data is illustrated in the form of a channel control word 200. The channel control word 200 defines codes that are required for access to each television program being transmitted. Fig. 11 and col. 12, line 66 to col. 13, line 3. Campbell discloses that the channel control word 200 and its constituent codes do the following:

> (1) define codes that are required for access to each television program being transmitted;
> (2) define the level of access required for the television program in question;
> (3) indicate whether the television program in question is a special event;
> (4) define a rating assigned to the television program in question; and
> (5) provide the converter with the code necessary to operate the video descrambler unit 116. Col. 13, lines 7-21.

From this disclosure, clearly, the channel control word and its constituent codes fail to anticipate the claimed valve control signals.

The format for the subscriber addressing data is illustrated in the form of four subscriber addressing data words, 210, 220, 230 and 240. Fig. 11 and col. 13, lines 25-28. These four words all contain constituent codes that allow converter 40 to gain access to

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the cable television system based on channel, tier of service, special event and program subject matter. Abstract; col. 13, lines 25-30; and col. 15, lines 16-17. For instance, the data transmitted in subscriber enable word 210 is used by converter control logic 104 to determine whether the converter apparatus should be enabled for processing television program signals to the television set. Col. 13, lines 51-55. Also, the tier code 202 of the channel control word 200 is compared by control logic 104 to a tier enable code 218 of the subscriber enable word 210 in order to determine whether a subscriber is enabled for a tier or level of service of a television program in question. Col. 15, lines 16-17 and 27-32. Also, the eligibility code 206 of the channel control word 200 is compared by control logic 104 to an eligibility code threshold 238 of the eligibility word 230 in order to determine whether an eligibility code threshold for the user station is exceeded by the eligibility code of the program currently on the selected channel. Col. 15, lines 16-17 and 54-59.

From a careful reading of the various functions of the subscriber addressing data words and constituent codes thereof, it is evident that they fail to anticipate Applicants' claimed valve control signals.

In sum, Applicants submit that Campbell fails to anticipate all the limitations of amended claim 2 and respectfully request withdrawal of the relevant rejection.

Claim 4 has been amended to recite the step of receiving an information transmission that contains at least one valve control signal. The claimed valve control signal controls a valve at a receiver station so that the valve performs at least one of the

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functions of ceasing to communicate and commencing to communicate signals to at least one processor of the receiver station.

Applicants repeat there exposition, *supra*, of the various failings of Campbell anticipate all of the limitations of amended claim 2. According to the relevant ones of said failings, Campbell fails to disclose at least one valve control signal, which meets the limitations of amended claim 4, controlling a valve to at a receiver station so that the valve performs at least one of the functions of ceasing to communicate and commencing to communicate signals to at least one processor of the receiver station. Accordingly, Campbell fails to anticipate the amended claim 4 steps of receiving an information transmission that contains said at least one valve control signal; receiving a second control signal which operates at a transmitter station to communicate said at least one valve control signal to a transmitter; and transmitting said information transmission and said at least one valve control signal in one of a broadcast transmission and a cablecast transmission to cause said valve to perform at least one of the functions of ceasing to communicate and commencing to communicate said signals to said at least one processor. Thus, Applicants submit that Campbell fails to anticipate all the limitations of amended claim 4 and respectfully request withdrawal of the relevant rejection.

Claim 5 has been amended to recite the step of receiving at least one valve control signal that controls a valve at a receiver station so that the valve performs at

least one of the functions of ceasing to communicate signals and commencing to communicate signals to at least one processor at the receiver station.

Applicants repeat there exposition, *supra*, of the various failings of Campbell anticipate all of the limitations of amended claim 2. According to the relevant ones of said failings, Campbell fails to disclose at least one valve control signal, which meets the limitations of amended claim 5, controlling a valve to at a receiver station so that the valve performs at least one of the functions of ceasing to communicate and commencing to communicate signals to at least one processor of the receiver station. Accordingly, Campbell fails to anticipate the amended claim 5 steps of receiving said at least one valve control signal; storing said at least one valve control signal; communicating said at least one valve control signal to the transmitter at a specific time; and transmitting said at least one information transmission and said at least one valve control signal in one of a broadcast transmission and a cablecast transmission to cause said valve to perform at least one of the functions of ceasing to communicate and commencing to communicate said signals to said at least one processor.

As to the rejection of Applicants' claims under non-statutory, non-obvious type double patenting, Applicants traverse the Examiner's double patenting rejection on three separate grounds which are set forth in the reply brief of Serial No. 08/113,329 (Atty. Docket No. 05634.008), incorporated herein by reference. For the sake of brevity, these arguments will not be set forth herein; the Examiner is respectfully directed to the above-mentioned reply brief.

As an initial matter, the examiner's rejection of the present application under the Schneller double patenting theory based on Harvey U.S. Patents 4,694,490 and 4,704,725 is improper because the present application does not claim the benefit of those applications under 35 U.S.C. § 120. Thus, there could never have been a basis for claiming the present subject matter in those applications. Therefore, the rejection based on Harvey U.S. Patents 4,694,490 and 4,704,725 should be withdrawn.

The PTO fails to specifically identify all claims from cited Harvey patents that cover specific claims in the present application. Rather, the Office Action references "representative claims" from patents and the present application. The Office Action does not cite specific elements from claims in a patent covering specific elements in claims in the application. In fact, the Office Action acknowledges that the patent claims and application claims are directed to different elements, but states that this "does not prohibit this rejection if there is common or interrelated subject matter recited." The Office Action then references Schneller in support of this erroneous statement, not supported by Schneller.

The claims in the present application are distinct from the claims in the Harvey patents. As previously mentioned, the Office Action states that the independent and distinct standard was the main factor in the Schneller court's determination that the double patenting rejection should be affirmed. The Office Action has misinterpreted this phrase. This phrase means independent 'or' distinct. MPEP (6th ed.) § 802.01. The MPEP defines independent as meaning "that there is no disclosed relationship between the two or more subjects disclosed" and that they are not connected. The MPEP defines

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the term distinct as meaning that "two or more subjects disclosed are related . . . but are capable of separate manufacture, use, or sale as claimed . . . ." Two or more subjects cannot then be unrelated, independent, and also related, and thus distinct. Analyzing the PTO's cited representative claims referenced in the Office Action, the claims of the present application are clearly distinct from the claims in the patents and therefore the claims in the present application are patentable. Although not required, Applicants will analyze the claims of the present application with respect to the designated representative claims of Harvey U.S. Patents 4,694,490 and 4,704,725.

<u>Claim 2 of the present application is distinct from the first representative claim, U.S. patent 4,694,490, claim 7</u>

Patent 4,694,490, claim 7 claims a method of communicating television program material, said material including a video signal containing a television program and an instruct-to-overlay signal, to multiple receiver stations. The video signal is received and the instruct-to-overlay signal detected and processed by a computer. The computer generates and transmits its overlay video signals to a television receiver which presents a combined display of the television program and overlay video signals, said display being specific to a particular user.

Present application claim 2, as amended, relates to a method of controlling the communication of signals at a receiver station. In this method, valve control signals are received, detected and used to control a valve at the receiver station to perform at least one of the functions of ceasing to communicate and commencing to communicate

embedded signals, in which said valve control signals were detected in, to a processor at the receiver station. Claim 2 does not use or generate instruct-to-overlay signals.

Patent claim 7 does not cover present application claim 2. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,694,490, claim 7	Present application, claim 2 (amended)
In a method of communicating television program material to a multiplicity of receiver stations each of which includes a television receiver and computer, the computers being adapted to generate and transmit overlay video signals, to their associated television receivers, said overlay signals causing the display of user specific information related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay video signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, and wherein a video signal containing a television program signal and an instruct to-overlay signal are transmitted to said receiver stations, the steps of: receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations detecting the presence of said instruct-to-overlay signal at said selected receiver stations at a time when the corresponding overlay is not being displayed, and coupling said instruct-to-overlay signal to the computers at said selected receiver	A method of controlling the communication of signals at a receiver station, said receiver station comprising (i) a valve for receiving and controlling the communication of signals and (ii) at least one processor that processes said signals, said method comprising the steps of: receiving one of a broadcast transmission and a cablecast transmission that includes an information transmission that includes embedded signals; demodulating said one of said broadcast transmission and said cablecast transmission to detect said information transmission therein ; detecting said embedded signals in said information transmission; communicating said embedded signals to said valve; detecting, at said valve, valve control signals that are embedded in said embedded signals; controlling said valve, in response to said valve control signals, so that said valve performs at least one of the functions of ceasing to communicate and commencing to communicate said embedded signals to said at least one processor.

stations, and
causing the computers at said selected
receiver stations to generate and transmit
their overlay video signals to their
associated television receivers in response
to said instruct-to-overlay signal, thereby
to present a combined display at the
selected receiver stations consisting of the
television program and the related
computer generated overlay, the overlays
displayed at a multiplicity of said receiver
stations being different, with each display
specific to a specific user.

Claim 2 of the present application is distinct from the second representative claim, U.S. patent 4,704,725, claim 3

Patent 4,704,725, claim 3 claims a method of communicating output signals

comprising data and user specific signals at a multiplicity of receiver stations from

computers to output devices. At least some of the computers can modify the user

specific signals by processing modification control signals. The computers

communicate the data and user specific signals in response to a received and detected

instruct-to-transmit signal.

Present application claim 2, as amended, relates to a method of controlling the

communication of signals at a receiver station. In this method, valve control signals are

received, detected and used to control a valve at the receiver station to perform at least

one of the functions of ceasing to communicate and commencing to communicate

embedded signals, in which said valve control signals were detected in, to a processor

at the receiver station. Present application claim 2 does not use or generate instruct-to-

transmit signals.

Patent claim 3 does not cover present application claim 2. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,704,725, claim 3	Present application, claim 2 (amended)
A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of: transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device; detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.	A method of controlling the communication of signals at a receiver station, said receiver station comprising (i) a valve for receiving and controlling the communication of signals and (ii) at least one processor that processes said signals, said method comprising the steps of: receiving one of a broadcast transmission and a cablecast transmission that includes an information transmission that includes embedded signals; demodulating said one of said broadcast transmission and said cablecast transmission to detect said information transmission therein ; detecting said embedded signals in said information transmission; communicating said embedded signals to said valve; detecting, at said valve, valve control signals that are embedded in said embedded signals; controlling said valve, in response to said valve control signals, so that said valve performs at least one of the functions of ceasing to communicate and commencing to communicate said embedded signals to said at least one processor.

<u>Claim 2 of the present application is distinct from the third representative claim, U.S. patent 4,965,825, claim 24</u>

Patent 4,965,825, claim 24 claims a method of generating user specific output information at a multiplicity of receiver stations. Each receiver station is programmed with a special user application and has a computer adapted to generate user specific output information. Each receiver station has an output device to which its computer transmits a user specific signal. At a time when the user specific output information does not exist, an instruct-to-generate signal is transmitted to the receiver stations. In response to the instruct-to-generate signal, the computers generate and transmit to the output devices the user specific output information in user specific signals which are different, "with each output signal specific to a specific user".

Present application claim 2, as amended, relates to a method of controlling the communication of signals at a receiver station. In this method, valve control signals are received, detected and used to control a valve at the receiver station to perform at least one of the functions of ceasing to communicate and commencing to communicate embedded signals, in which said valve control signals were detected in, to a processor at the receiver station. Present application claim 2 does not use a special user application to program a receiver station or transmit an instruct-to-generate signal.

Patent claim 24 does not cover present application claim 2. The two claims are capable of separate manufacture, use, and sale as claimed and, as such, these two inventions are distinct.

U.S. patent 4,965,825, claim 24	Present application, claim 2 (amended)
In a method of generating computer output at a multiplicity of receiver stations	A method of controlling the communication of signals at a receiver

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each of which includes a computer adapted to generate and transmit user specific output information content and user specific signals to one or more associated output devices, with at least one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify said computers' method of processing data and generating output information content, each of said computers, being programmed to accommodate a special user application, the steps of: transmitting an instruct-to-generate signal to said computers at a time when corresponding user specific output information content does not exist, and causing said last named computers to generate their user specific output information content in response to said instruct-to-generate signal, thereby to transmit to each of their associated output devices an output information content and the user specific signal of its associated computer, the output signals at a multiplicity of said output devices being different, with each output signal specific to a specific user.

station, said receiver station comprising (i) a valve for receiving and controlling the communication of signals and (ii) at least one processor that processes said signals, said method comprising the steps of:

receiving one of a broadcast transmission and a cablecast transmission that includes an information transmission that includes embedded signals;

demodulating said one of said broadcast transmission and said cablecast transmission to detect said information transmission therein ;

detecting said embedded signals in said information transmission;

communicating said embedded signals to said valve;

detecting, at said valve, valve control signals that are embedded in said embedded signals;

controlling said valve, in response to said valve control signals, so that said valve performs at least one of the functions of ceasing to communicate and commencing to communicate said embedded signals to said at least one processor.

Claim 2 of the present application is distinct from the fourth representative claim, U.S. patent 5,109,414, claim 15

Patent 5,109,414, claim 15 claims a signal processing system which receives data from a data source and outputs the data to a matrix switch and a detector, control signals are detected within the received data and stored for further processing, and a processor controls the directing functions of (1) the matrix switch which receives the

data as input and can direct selected portions of the data to a data transmission means and (2) the device which stores and transfers the control signals to the processor.

Present application claim 2, as amended, relates to a method of controlling the communication of signals at a receiver station. In this method, valve control signals are received, detected and used to control a valve at the receiver station to perform at least one of the functions of ceasing to communicate and commencing to communicate embedded signals, in which said valve control signals were detected in, to a processor at the receiver station. Present application claim 2 does not transfer control signals to a storage/transfer means.

Accordingly, the two claims are capable of separate manufacture, use, and sale as claimed and, therefore, these two inventions are distinct.

U.S. patent 5,109,414, claim 15	Present application, claim 2 (amended)

In a signal processing system,
    a receiver/distribution means for receiving data from a data source and for outputting said data to a matrix switch means and a control signal detector means,
    a matrix switch means for receiving said data from said receiver/distributor means and for directing selected portions of said received data to a data transmission means,
    a control signal detector means for detecting control signals respecting said data and transferring said control signals to a storage/transfer means, said control signal means being configured to detect said control signals at a predetermined location within said data,
    a storage/transfer means for receiving and storing said control signals
	A method of controlling the communication of signals at a receiver station, said receiver station comprising (i) a valve for receiving and controlling the communication of signals and (ii) at least one processor that processes said signals, said method comprising the steps of:
	
	    receiving one of a broadcast transmission and a cablecast transmission that includes an information transmission that includes embedded signals;
	
	    demodulating said one of said broadcast transmission and said cablecast transmission to detect said information transmission therein ;
	
	    detecting said embedded signals in said information transmission;
	
	    communicating said embedded

and for transferring at least a portion of said control signals to a processor means for further processing, and

    a processor means for controlling the directing functions of said matrix switch means and the transfer functions of said storage/transfer means based on instructions contained in said control signals.

signals to said valve;

    detecting, at said valve, valve control signals that are embedded in said embedded signals;

    controlling said valve, in response to said valve control signals, so that said valve performs at least one of the functions of ceasing to communicate and commencing to communicate said embedded signals to said at least one processor.

The Office Action states that "determination of a possible non-statutory double patenting rejection obvious-type in each of the related 327 applications over each other will be deferred until a later time." Applicants submit that the examiner and the PTO cannot defer further rejections to a later time. Every ground of rejection should be made in examiner's first Office Action. 37 CFR § 1.104(a) states that "[o]n taking up an application for examination . . . the examiner shall make a thorough study thereof and shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention. The examination shall be complete with respect to both compliance of the application . . . with the applicable statutes and rules and to the patentability of the invention as claimed, as well as with respect to matters of form, unless otherwise indicated." The MPEP states "[t]he examiner's action will be complete as to all matters, except that in appropriate circumstances, such as misjoinder of invention, fundamental defects in the application, and the like, the action of the examiner may be limited to such matters before action is made." MPEP § 707.07, citing 37 CFR § 1.105. Finally, "[p]iecemeal examination should be avoided as much as possible. The examiner ordinarily should reject each claim on all valid grounds

available . . . ." "Where a major technical rejection is proper, it should be stated with full development of reasons rather than by mere conclusion coupled with some stereotyped expression." MPEP § 707.07(g). Applicants submit that the examiner has a duty to give each application a complete examination, to make rejections with specificity, and that not to defer rejections. For these reasons, applicants likewise traverse the paragraph 14 rejection based on the "judicially created doctrine of double patenting over the claims of copending U.S. application 08/113,329 and the following [list of all applicants copending applications]." Applicants submit that this rejection, even if appropriately made with specificity, should be a provisional double patenting rejection. Applicants respectfully request that this rejection be withdrawn.

Applicants acknowledge their duty to maintain a line of patentable demarcation between related applications. Assuming, *arguendo*, that substantially duplicate claims exist, the applicants intend to make a good faith effort to alert the PTO of any instances in which the PTO treats such claims inconsistently.

Applicants acknowledge and appreciate the examiner's concern over the use of alternative claim language. Applicants assert that they believe that the disclosure supports every possible embodiment or permutation that can be created using said language. During the prosecution of this application, applicants intend to ensure that the disclosure supports each possible embodiment claimed using alternative claims.

As to the multiplicity rejection in parent file 07/096,096, Applicants submit that the PTO gave a multiplicity rejection in this case and limited applicants to twenty five claims. Roughly one hundred claims had been originally filed. There was no

substantive review of any of the other claims outside of the twenty five. Applicants were not permitted to submit additional claims although a request was made. The disclosure of applicants addresses too many subject areas to be adequately covered by a small number of claims. Applicants submit that "nexis" analysis is not required by applicant.

Applicants acknowledge and appreciate the interviews provided by the PTO. Applicants also appreciate the detailed description of the interviews provided in the Office Action. The Office Action states that "the Group would like to have a complete grouping of applications in a manner that was submitted earlier for only a portion of the total filings." Applicants note that based on the Office Actions received thus far, the PTO does not appear to be following the groupings applicants submitted previously. The order of examination of applicants' applications do not seem to have any correspondence to the groupings previously submitted. Applicants, therefore, will not supply further groupings. Applicants will, however, gladly supply further groupings if requested by the PTO for the purpose of following these groupings. Mr. Groody has confirmed in a telephone conversation between Mr. Groody and Mr. Scott that no more groupings need be sent.

In the interest of maintaining a clear record, applicants respectfully traverse the Office Action's interview summary statement that an offer was made to terminally disclaim the present application with the '81 or '87 patents. Rather, applicants respectfully submit that their offer was to disclaim a block of copending applications
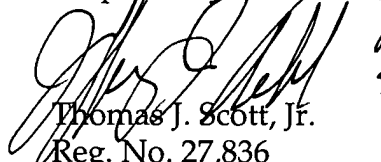
against one another, provided their issue date was in close enough proximity so as not to result in unnecessarily great losses in patent term duration.

In accordance with the foregoing it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, that all pending claims patentably distinguish over the prior art, taken in any proper combination. Thus, there being no further outstanding objections or rejections, the application is submitted as being in a condition for allowance, which action is earnestly solicited.

If the Examiner has any remaining informalities to be addressed, it is believed that prosecution can be expedited by the Examiner contacting the undersigned attorney for telephone interview to discuss resolution of such informalities.

Respectfully submitted,

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